

Name: _____

Quiz Exponential and Solving Review

Date: _____

Write an equivalent expression without negative exponents.

1. $\frac{3a^{-2}b^3}{4c^{-4}d^2}$

Simplify.

2. $(4x^8)^{-3}$

3. $\frac{-14a^{14}b^{-5}}{-18a^{-2}b^{-10}}$

4. $(6x^{-2}y^3z^2)^{-2}$

5. $\left[\frac{(2x^3y^2)^{-2}}{(x^{-5}y^{-1})^3} \right]^2$

6. $14m^2n^3 - 2m^{-3}n^2$

7. $5x^ay^b - 6x^cb^3$

Solve for the given variable.

8. $B = \frac{1}{2}x + \frac{1}{2}y$, for y

9. $L = 2r + 2t$, for t

10. $S = 4\pi r^2$, for r